

reference nucleotide sequence selected from the group consisting of sequences of
SEQ ID NOs: 1 to 15 and their complementary sequences.

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3. (Twice Amended) Nucleic material of the retroviral genomic type according to claim 1, comprising a nucleic fragment inserted between two sequences corresponding respectively to the LTR region and to the gag gene for the retroviral genomic structure.

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4. (Amended) Nucleic material of the subgenomic retroviral type, consisting of a nucleotide sequence identical to SEQ ID NO: 11, with at least one deletion.

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7. (Twice Amended) A nucleotide fragment of at least 100 bases, comprising a nucleotide sequence selected from the group consisting of:

a) all the nucleotide sequences, partial and complete, of a nucleic material according to claim 1;

b) all the nucleotide sequences, partial and complete, of a clone selected from the group consisting of:

cl.6A2 (SEQ ID NO: 1),

cl.6A1 (SEQ ID NO: 2),

cl.7A16 (SEQ ID NO: 3),

cl.Pi22 (SEQ ID NO: 4),

cl.24.4 (SEQ ID NO: 5),

cl.C4C5 (SEQ ID NO: 6),

cl.PH74 (SEQ ID NO: 7),

cl.PH7 (SEQ ID NO: 8),

cl.Pi5T (SEQ ID NO: 9),

cl.44.4 (SEQ ID NO: 10),

HERV-W (SEQ ID NO: 11).

cl.6A5 (SEQ ID NO: 12),

cl.7A20 (SEQ ID NO: 13),

cl.7A21 (SEQ ID NO: 14), and

LTR (SEQ ID NO: 15);

c) the sequences which are respectively complementary to the sequences according to a) and b); and

d) the sequences which are respectively equivalent to the sequences according to a), b) and c).

8. (Twice Amended) A nucleic probe for the detection of a nucleic material, wherein said nucleic probe is capable of hybridizing specifically with the reference nucleotide sequence of the nucleic material according to claim 1.

9. (Amended) A probe according to claim 8, comprising a marker.

10. (Twice Amended) A nucleic primer for the amplification by polymerization of an RNA or of a DNA, comprising a nucleotide sequence capable of hybridizing specifically with the reference nucleotide sequence of the nucleic material according to claim 1.

11. (Amended) A nucleic probe or nucleic primer, comprising a nucleotide sequence selected from the group consisting of SEQ ID NOs: 16 to 28.

12. (Amended) An RNA or DNA, comprising a nucleotide fragment according to claim 7.

13. (Amended) A peptide encoded by any open reading frame belonging to a nucleotide fragment according to claim 7.

14. (Amended) A peptide according to claim 13, wherein said peptide is encoded by a nucleotide fragment comprising an open reading frame encoding one or more retroviral ENV proteins.

18. (Amended) A method for the molecular labeling of at least one member
SUB D2 } selected from the group consisting of an autoimmune disease, a pathology associated with an
B6 } autoimmune disease, a pathological pregnancy, and an unsuccessful pregnancy, comprising:
identifying and/or quantifying any nucleotide fragment according to claim 7 in
any biological body material.

19. (Amended) The method according to claim 18, further comprising:
detecting cells expressing the nucleotide fragment in said biological body
material.

20. (Twice Amended) A diagnostic or therapeutic composition comprising a
nucleic material according to claim 1.

Please add new claims 21-38 as follows:

--21. A method of diagnosing an autoimmune disease, a pathology associated with
an autoimmune disease, a pathological pregnancy, or an unsuccessful pregnancy, said method
comprising:

B7 } obtaining a biological sample;
contacting said biological sample with a molecular marker comprising a
nucleic material according to claim 1; and
detecting for said molecular marker.--

--22. A method of diagnosing susceptibility to an autoimmune disease or a
pathology associated with an autoimmune disease, a risk of a pathological pregnancy, or a
risk of an unsuccessful pregnancy, said method comprising:

obtaining a biological sample;
contacting said biological sample with a chromosomal marker comprising a
nucleic material according to claim 1; and

detecting for said chromosomal marker.--

--23. A method of detecting a gene associated with susceptibility to an autoimmune disease or a pathology associated with an autoimmune disease, a risk of a pathological pregnancy, or a risk of an unsuccessful pregnancy, said method comprising:

obtaining a biological sample;

Bb contacting said biological sample with a proximity marker comprising a nucleic material according to claim 1; and

detecting for said proximity marker.--

--24. Nucleic material according to claim 1, wherein said equivalent sequences exhibit, for any sequence of 100 contiguous monomers, at least 70% homology with said sequences of SEQ ID NOs: 1 to 15, respectively.--

--25. Nucleic material according to claim 1, wherein said equivalent sequences exhibit, for any sequence of 100 contiguous monomers, at least 90% homology with said sequences of SEQ ID NOs: 1 to 15, respectively.--

SUB P3) --26. Nucleic material according to claim 2, wherein said polypeptide exhibits, for any contiguous sequence of at least 30 amino acids, at least 90% identity with a peptide sequence capable of being encoded by at least a functional part of said reference nucleotide sequence.--

--27. Nucleic material of the retroviral genomic type according to claim 2, comprising a nucleic fragment inserted between two sequences corresponding respectively to the LTR region and to the gag gene for said retroviral genomic structure.--

--28. Nucleic material according to claim 27, wherein said nucleic fragment comprises the sequence of SEQ ID NO: 12.--

--29. Nucleic material according to claim 3, wherein said nucleic fragment comprises the sequence of SEQ ID NO: 12.--

SUB D3
CONT

--30. Nucleic material according to claim 4, wherein said nucleotide sequence comprises a sequence selected from the group consisting of the sequences of SEQ ID NOs: 7, 8 and 9.--

--31. Nucleic material according to claim 4, comprising at least one functional nucleotide sequence encoding at least one retroviral protein.--

--32. Nucleic material according to claim 4, comprising at least one regulatory nucleotide sequence.--

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Cont'd

--33. A nucleotide fragment according to claim 7, wherein said equivalent sequences exhibit, for any sequence of 100 contiguous monomers, at least 50% homology with the sequences according to a), b) and c).--

--34. A nucleotide fragment according to claim 7, wherein said equivalent sequences exhibit, for any sequence of 100 contiguous monomers, at least 70% homology with the sequences according to a), b) and c).--

SUB D4

--35. A nucleotide fragment according to claim 7, wherein said equivalent sequences exhibit, for any sequence of 100 contiguous monomers, at least 90% homology with the sequences according to a), b) and c).--

--36. A replication vector, comprising a nucleotide fragment according to claim 7.--

--37. The peptide of claim 13, wherein said peptide comprises an oligopeptide that forms an antigenic determinant recognized by sera from patients affected by an autoimmune disease, a pathology associated with an autoimmune disease, a pathological pregnancy, or an unsuccessful pregnancy.--

--38. The method of claim 18, wherein said biological body material comprises a body fluid.--